

application of energy to the composition that is sufficient to puff the puffable food component.

5. The composition of claim 4 wherein the coating blend comprises:
water;
fat or oil; and
the sweetening agent, the concentration of the sweetening agent, based upon the dry weight of the sweetening agent, in the coating blend, based upon the total weight of the coating blend, ranging from about 40 weight percent to about 70 weight percent.
6. The composition of claim 4 wherein the puffable food component comprises raw poppable corn kernels.
7. A composition, the composition comprising:
a puffable food element; and
an edible emulsion that comprises one or more fluid components, the edible emulsion being a water-in-oil emulsion or an oil-in-water-in-oil emulsion, the puffable food element located in coating relation with the edible emulsion, and about 35 grams of the edible emulsion exhibiting less than about 2 grams of fluid component leakage during a 48 hour period when the edible emulsion is held at a temperature of about 72 °F.
8. The composition of claim 7 wherein about 35 grams of the edible emulsion exhibits less than about 1 gram of fluid component leakage during a 48 hour period when the edible emulsion is held at a temperature of about 100 °F.

9. The composition of claim 7 wherein the puffable food element comprises puffable food pellets, the puffable food pellets comprising raw grain.
10. The composition of claim 9 wherein the raw grain is selected from the group consisting of corn, rice, oats, wheat, milo, sorghum, millet, and any of these in any combination.
11. The composition of claim 7 wherein the puffable food element comprises raw poppable corn kernels.
12. A composition, the composition comprising:
 - a puffable food component; and
 - a coating blend, the puffable food component located in coating relation with the coating blend, the coating blend comprising:
 - fat or oil; and
 - an aqueous component, the aqueous component present in the coating blend as droplets having a maximum diameter of about 30 micrometers, the coating blend effective for forming a fat continuous coating on a puffed form of the puffable food component upon application of energy to the composition that is sufficient to puff the puffable food component.
13. The composition of claim 12 wherein the droplets of the aqueous component have a median diameter in the range of about 5 micrometers to about 10 micrometers.

14. The composition of claim 12 wherein the coating blend further comprises a sweetener.
15. The composition of claim 12 wherein the puffable food component comprises raw grain kernels.
16. The composition of claim 15 wherein the raw grain kernels are selected from the group consisting of corn, rice, oats, wheat, milo, sorghum, millet, and any of these in any combination.
17. The composition of claim 12 wherein the puffable food component comprises raw poppable corn kernels.
18. A composition, the composition comprising:
 - a puffable food component; and
 - a coating blend, the puffable food component located in coating relation with the coating blend, the coating blend comprising:
 - fat or oil;
 - water;
 - a sweetener; and
 - a flavor additive, the flavor additive isolated from the sweetener and from the puffable food component and the sweetener isolated from the flavor additive and from the puffable food component.
19. The composition of claim 18 wherein the puffable food component comprises pellets of raw grain.

- | Cognitive Function | | Mood | | Quality of Life | | Social Function | | Health Status | |
|--------------------|-------|---------|-------|-----------------|-------|-----------------|-------|---------------|-------|
| Measure | Score | Measure | Score | Measure | Score | Measure | Score | Measure | Score |
| MMSE | 24.0 | PHQ-9 | 10.0 | QoL | 70.0 | SF-36 | 50.0 | HRQoL | 60.0 |
| MoCA | 26.0 | GAD-7 | 8.0 | QoL | 75.0 | SF-36 | 55.0 | HRQoL | 65.0 |
| Trail Making Test | 15.0 | STAI | 45.0 | QoL | 80.0 | SF-36 | 60.0 | HRQoL | 70.0 |
| Digit Span | 12.0 | STAI | 50.0 | QoL | 85.0 | SF-36 | 65.0 | HRQoL | 75.0 |
| Block Design | 18.0 | STAI | 55.0 | QoL | 90.0 | SF-36 | 70.0 | HRQoL | 80.0 |
| Verbal Fluency | 10.0 | STAI | 60.0 | QoL | 95.0 | SF-36 | 75.0 | HRQoL | 85.0 |
| Stroop Test | 12.0 | STAI | 65.0 | QoL | 100.0 | SF-36 | 80.0 | HRQoL | 90.0 |
| Digit Span | 12.0 | STAI | 70.0 | QoL | 105.0 | SF-36 | 85.0 | HRQoL | 95.0 |
| Block Design | 18.0 | STAI | 75.0 | QoL | 110.0 | SF-36 | 90.0 | HRQoL | 100.0 |
| Verbal Fluency | 10.0 | STAI | 80.0 | QoL | 115.0 | SF-36 | 95.0 | HRQoL | 105.0 |
| Stroop Test | 12.0 | STAI | 85.0 | QoL | 120.0 | SF-36 | 100.0 | HRQoL | 110.0 |
| Digit Span | 12.0 | STAI | 90.0 | QoL | 125.0 | SF-36 | 105.0 | HRQoL | 115.0 |
| Block Design | 18.0 | STAI | 95.0 | QoL | 130.0 | SF-36 | 110.0 | HRQoL | 120.0 |
| Verbal Fluency | 10.0 | STAI | 100.0 | QoL | 135.0 | SF-36 | 115.0 | HRQoL | 125.0 |
| Stroop Test | 12.0 | STAI | 105.0 | QoL | 140.0 | SF-36 | 120.0 | HRQoL | 130.0 |
| Digit Span | 12.0 | STAI | 110.0 | QoL | 145.0 | SF-36 | 125.0 | HRQoL | 135.0 |
| Block Design | 18.0 | STAI | 115.0 | QoL | 150.0 | SF-36 | 130.0 | HRQoL | 140.0 |
| Verbal Fluency | 10.0 | STAI | 120.0 | QoL | 155.0 | SF-36 | 135.0 | HRQoL | 145.0 |
| Stroop Test | 12.0 | STAI | 125.0 | QoL | 160.0 | SF-36 | 140.0 | HRQoL | 150.0 |
| Digit Span | 12.0 | STAI | 130.0 | QoL | 165.0 | SF-36 | 145.0 | HRQoL | 155.0 |
| Block Design | 18.0 | STAI | 135.0 | QoL | 170.0 | SF-36 | 150.0 | HRQoL | 160.0 |
| Verbal Fluency | 10.0 | STAI | 140.0 | QoL | 175.0 | SF-36 | 155.0 | HRQoL | 165.0 |
| Stroop Test | 12.0 | STAI | 145.0 | QoL | 180.0 | SF-36 | 160.0 | HRQoL | 170.0 |
| Digit Span | 12.0 | STAI | 150.0 | QoL | 185.0 | SF-36 | 165.0 | HRQoL | 175.0 |
| Block Design | 18.0 | STAI | 155.0 | QoL | 190.0 | SF-36 | 170.0 | HRQoL | 180.0 |
| Verbal Fluency | 10.0 | STAI | 160.0 | QoL | 195.0 | SF-36 | 175.0 | HRQoL | 185.0 |
| Stroop Test | 12.0 | STAI | 165.0 | QoL | 200.0 | SF-36 | 180.0 | HRQoL | 190.0 |
| Digit Span | 12.0 | STAI | 170.0 | QoL | 205.0 | SF-36 | 185.0 | HRQoL | 195.0 |
| Block Design | 18.0 | STAI | 175.0 | QoL | 210.0 | SF-36 | 190.0 | HRQoL | 200.0 |
| Verbal Fluency | 10.0 | STAI | 180.0 | QoL | 215.0 | SF-36 | 195.0 | HRQoL | 205.0 |
| Stroop Test | 12.0 | STAI | 185.0 | QoL | 220.0 | SF-36 | 200.0 | HRQoL | 210.0 |
| Digit Span | 12.0 | STAI | 190.0 | QoL | 225.0 | SF-36 | 205.0 | HRQoL | 215.0 |
| Block Design | 18.0 | STAI | 195.0 | QoL | 230.0 | SF-36 | 210.0 | HRQoL | 220.0 |
| Verbal Fluency | 10.0 | STAI | 200.0 | QoL | 235.0 | SF-36 | 215.0 | HRQoL | 225.0 |
| Stroop Test | 12.0 | STAI | 205.0 | QoL | 240.0 | SF-36 | 220.0 | HRQoL | 230.0 |
| Digit Span | 12.0 | STAI | 210.0 | QoL | 245.0 | SF-36 | 225.0 | HRQoL | 235.0 |
| Block Design | 18.0 | STAI | 215.0 | QoL | 250.0 | SF-36 | 230.0 | HRQoL | 240.0 |
| Verbal Fluency | 10.0 | | | | | | | | |

25. The composition of claim 22 wherein the puffable food component comprises pellets of raw grain.
26. The composition of claim 22 wherein the puffable food component comprise raw poppable corn kernels.
27. A method of making a coated puffed food product, the method comprising:
forming an edible emulsion, the edible emulsion being a water-in-oil emulsion or an oil-in-water-in-oil emulsion and the edible emulsion comprising a sweetening agent;
placing the edible emulsion and a puffable food component in coating relation with each other; and
applying energy to the edible emulsion and to the puffable food component, the applied energy effective to transform the puffable food component into a puffed food component while transforming the edible emulsion into a coating on the puffed food component to form the coated puffed food product.
28. The method of claim 27 wherein the edible emulsion comprises:
water;
fat or oil; and
the sweetening agent, the concentration of the sweetening agent, based upon the dry weight of the sweetening agent, in the edible emulsion, based upon the total weight of the edible emulsion, ranging from about 40 weight percent to about 70 weight percent.
29. The method of claim 27 wherein the puffable food component comprises raw poppable corn kernels.

30. A method of making a coated puffed food product, the method comprising:
forming a coating blend, the coating blend comprising a sweetening agent;
placing the coating blend and a puffable food component in coating
relation with each other; and
applying energy to the coating blend and to the puffable food component,
the applied energy effective to transform the puffable food
component into a puffed food component while transforming the
edible emulsion into a fat continuous coating on the puffed food
component to form the coated puffed food product.
31. The method of claim 30 wherein the coating blend comprises:
water;
fat or oil; and
the sweetening agent, the concentration of the sweetening agent, based
upon the dry weight of the sweetening agent, in the coating blend,
based upon the total weight of the coating blend, ranging from
about 40 weight percent to about 70 weight percent.
32. The method of claim 30 wherein the puffable food component comprises
raw poppable corn kernels.
33. A method of making a coated puffed food product, the method comprising:
forming an edible emulsion that comprises one or more fluid components,
the edible emulsion being a water-in-oil emulsion or an oil-in-
water-in-oil emulsion, about 35 grams of the edible emulsion
exhibiting less than about 2 grams of fluid component leakage
during a 48 hour period when the edible emulsion is held at a
temperature of about 72°F;

placing the edible emulsion and a puffable food element in coating relation with each other; and

applying energy to the edible emulsion and to the puffable food element, the applied energy effective to transform the puffable food element into a puffed food element while transforming the edible emulsion into a coating on the puffed food element to form the coated puffed food product.

34. The method of claim 33 wherein about 35 grams of the edible emulsion exhibits less than about 1 gram of fluid component leakage during a 48 hour period when the edible emulsion is held at a temperature of about 100°F.

35. The method of claim 33 wherein the puffable food element comprises puffable food pellets, the puffable food pellets comprising raw grain.

36. The method of claim 35 wherein the raw grain is selected from the group consisting of corn, rice, oats, wheat, milo, sorghum, millet, and any of these in any combination.

37. The method of claim 35 wherein the puffable food pellets comprise raw poppable corn kernels.

38. The method of claim 33 wherein forming the edible emulsion comprises:

heating a fat and an emulsifying agent to form a heated fat phase, the fat heated to a temperature sufficient to remove any memory of crystallization from the fat;

adding an aqueous solution to the heated fat phase under high shear mixing conditions to form the edible emulsion; and

crystallizing fat present in the edible emulsion.

39. The method of claim 33 wherein applying energy to the edible emulsion and to the puffable food element comprises applying microwave energy to the edible emulsion and to the puffable food element.
40. A method of making a coated puffed food product, the method comprising:
forming a coating blend, the coating blend comprising:
fat; and
droplets of an aqueous component, the droplets of the aqueous component having a maximum diameter of about 30 micrometers;
placing the coating blend and a puffable food component in coating relation with each other; and
applying energy to the coating blend and to the puffable food component, the applied energy effective to transform the puffable food component into a puffed food component while transforming the coating blend into a fat-continuous coating on the puffed food component to form the coated puffed food product.
41. The method of claim 40 wherein the droplets of the aqueous component have a median diameter in the range of about 5 micrometers to about 10 micrometers.
42. The method of claim 40 wherein the coating blend further comprises a sweetener.
43. The method of claim 40 wherein the puffable food component comprises raw grain kernels.
44. The method of claim 40 wherein the puffable food component comprises raw poppable corn kernels.

45. The method of claim 40 wherein forming the coating blend comprises:
heating the emulsifying agent and the fat to form a heated fat phase, the fat
heated to a temperature sufficient to remove any memory of
crystallization from the fat;
adding an aqueous solution to the heated fat phase under high shear
mixing conditions to form the coating blend; and
crystallizing fat present in the coating blend.
46. The method of claim 40 wherein applying energy to the coating blend and
to the puffable food component comprises applying microwave energy to the coating
blend and to the puffable food component.
47. A method of making a coated puffed food product, the method comprising:
forming a coating blend, the coating blend comprising:
a fat;
water;
a sweetener; and
a flavor additive;
placing the coating blend and a puffable food component in coating
relation with each other, the flavor additive isolated from the
sweetener and from the puffable food component and the
sweetener isolated from the flavor additive and from the puffable
food component; and
applying energy to the coating blend and to the puffable food component,
the applied energy effective to transform the puffable food
component into a puffed food component while transforming the
coating blend into a coating on the puffed food component to form
the coated puffed food product.

48. The method of claim 47 wherein the puffable food component comprises raw grain kernels.
49. The method of claim 47 wherein the puffable food component comprises raw poppable corn kernels.
50. The method of claim 47 wherein forming the coating blend comprises:
heating the fat and an emulsifying agent to form a heated fat phase, the fat heated to a temperature sufficient to remove any memory of crystallization from the fat;
adding an aqueous solution to the heated fat phase under high shear mixing conditions to form the coating blend; and
crystallizing fat present in the coating blend.
51. The method of claim 50, the method further comprising:
blending a water-soluble form of the flavor additive into the aqueous solution prior to addition of the aqueous solution to the heated fat phase;
blending an oil-soluble form of the flavor additive into the fat phase prior to addition of the aqueous solution to the fat phase; or
emulsifying an oil-soluble form of the flavor additive in the aqueous solution prior to addition of the aqueous solution to the heated fat phase.
52. The method of claim 47 wherein applying energy to the coating blend and to the puffable food component comprises applying microwave energy to the coating blend and to the puffable food component.

58. The method of claim 53 wherein forming the coating blend comprises:
isolating the first potentially reactive additive from contact with the
puffable food composition during the period extending from
coating blend formation to energy application.
59. The method of claim 58 wherein forming the coating blend further
comprises:
heating the fat and an emulsifying agent to form a heated fat phase, the fat
heated to a temperature sufficient to remove any memory of
crystallization from the fat; and
adding an aqueous solution to the heated fat phase under high shear
mixing conditions to form the coating blend.
60. The method of claim 59, the method further comprising:
blending a water-soluble form of the first potentially reactive additive into
the aqueous solution prior to addition of the aqueous solution to
the heated fat phase;
blending an oil-soluble form of the first potentially reactive additive into
the fat phase prior to addition of the aqueous solution to the fat
phase; or
emulsifying an oil-soluble form of the first potentially reactive additive in
the aqueous solution prior to addition of the aqueous solution to
the heated fat phase.

